

REMARKS

The Examiner has rejected claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Apostolos et al ("Apostolos"), objected to claims 4 and 5 as depending upon a rejected base claim, and allowed claim 6. The Examiner states that Apostolos teaches a method of identifying a signal type for an unknown signal (Abstract; column 2, lines 48-53) comprising the steps of selecting the unknown frequency of interest from a displayed spectral waveform for a specified range of frequencies (column 1, lines 32-44), processing spectral data representing the unknown of interest to ascertain characteristics of the signal without demodulating the unknown signal (column 6, lines 37-44), and from the characteristics of the unknown signal determining an identification of the signal type (column 3, lines 56-59; column 13, lines 39-49). Applicants respectfully traverse this improper and nonobvious conclusion by the Examiner.

Apostolos sorts signals from a compressive receiver according to the type of modulation on the signal using histograms that designate a particular condition – consecutive 1's or 0's, frequency and amplitude. Despite the Examiner's reference to column 1, lines 32-44, Apostolos does not select an unknown frequency of interest from a displayed spectral waveform, but merely indicates that "the high frequency band can be divided into 10,000 different frequency recognition channels." Apostolos seeks a particular modulation type so that "once a signal bearing a particular type of modulation is identified, this signal can be singled out and shunted to a conventional receiver for more complete identification." This is not the processing of spectral data to ascertain characteristics of the signal, and in fact Apostolos specifically states that "[T]his is unlike spectrum analysis because the ordinate is not amplitude." Applicants submit that the histogram approach described

by Apostolos neither anticipates nor renders obvious to one of ordinary skill in the art the invention recited by Applicants in claim 1.

Apostolos generates a center finder pulse from the peak of the envelope of the signals from the compressive receiver, and from the particular time of the pulse the frequency of the signal is determined. There is no comparison of the frequency of the signal with a database of spectral assignments for a plurality of known signal types, as recited in claim 2.

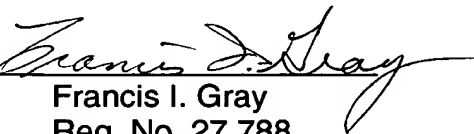
Apostolos does not appear to find the occupied bandwidth for the unknown signal as recited in claim 3. Apostolos provides parallel channels to cover the whole range of frequencies scanned by the compressive receiver and generates the histograms accordingly.

In view of the foregoing argument allowance of claims 1-5 is urged, and such action and the issuance of this case together with allowed claim 6 are requested.

Respectfully submitted,

NIKHIL DESHPANDE et al

TEKTRONIX, INC.
P. O. Box 500, MS 50-LAW
Beaverton, Oregon 97077
(503) 627-7261

By 
Francis I. Gray
Reg. No. 27,788
Attorney for Applicant

6926 US